



# Goal #3: Environment

March 29, 2022



# Goals & Objectives

- 1. Economic Development**
- 2. Institutional Governance & Policy**
- 3. Environment**
- 4. Education**
- 5. Quality of Life**

# 2022 Presentation Schedule

## DATE

February 1, 2022

March 1, 2022

March 29, 2022

April 26, 2022

May 24, 2022

## GOAL

1. Economic Development

2. Institutional Governance & Policy

3. Environment

4. Education

5. Quality of Life

June 21, 2022

July 26, 2022

September 27, 2022

October 25, 2022

November 29, 2022

1. Economic Development

2. Institutional Governance & Policy

3. Environment

4. Education

5. Quality of Life

# Presentation Team



**Deborah E. Hall**  
Deputy County  
Administrator



**Deborah A. Carpenter**  
Director, Planning and  
Growth Management



**Kelly Robertson-Slagle**  
Director, Economic  
Development



**Bernard Cochran**  
Acting Director, Public  
Works

**Frances Sherman**  
Chief of Environmental  
Resources, Public  
Works

# Environment

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Charles County is protecting the environment by carefully managing its natural resources; conserving its forested, agricultural, and rural lands; ensuring clean waterways and shoreline, and responsibly managing its solid waste. Charles County is integrating climate change management practices, investing in renewable energy sources, and replacing infrastructure that will ensure a clean and sustainable water supply.

# Conservation Programs

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**Conserve natural resource assets through sustainable forestry and agricultural/rural land preservation. Plan and implement climate change best management practices throughout county government operations.**

# Land Preservation

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# Forest Conservation



## FINAL DRAFT

Planning Commission to hold its 2nd public hearing in spring of 2022 with final adoption by Commissioners expected in summer 2022.

## PRIORITY AREAS

Final draft contains enhanced thresholds for forest retention

## WORKSHOP

Hosted a Southern MD Forestry Workshop at the Charles Soil Conservation District Office on October 13, 2021 in cooperation with University of MD Extension.



# AGRICULTURAL LAND PRESERVATION



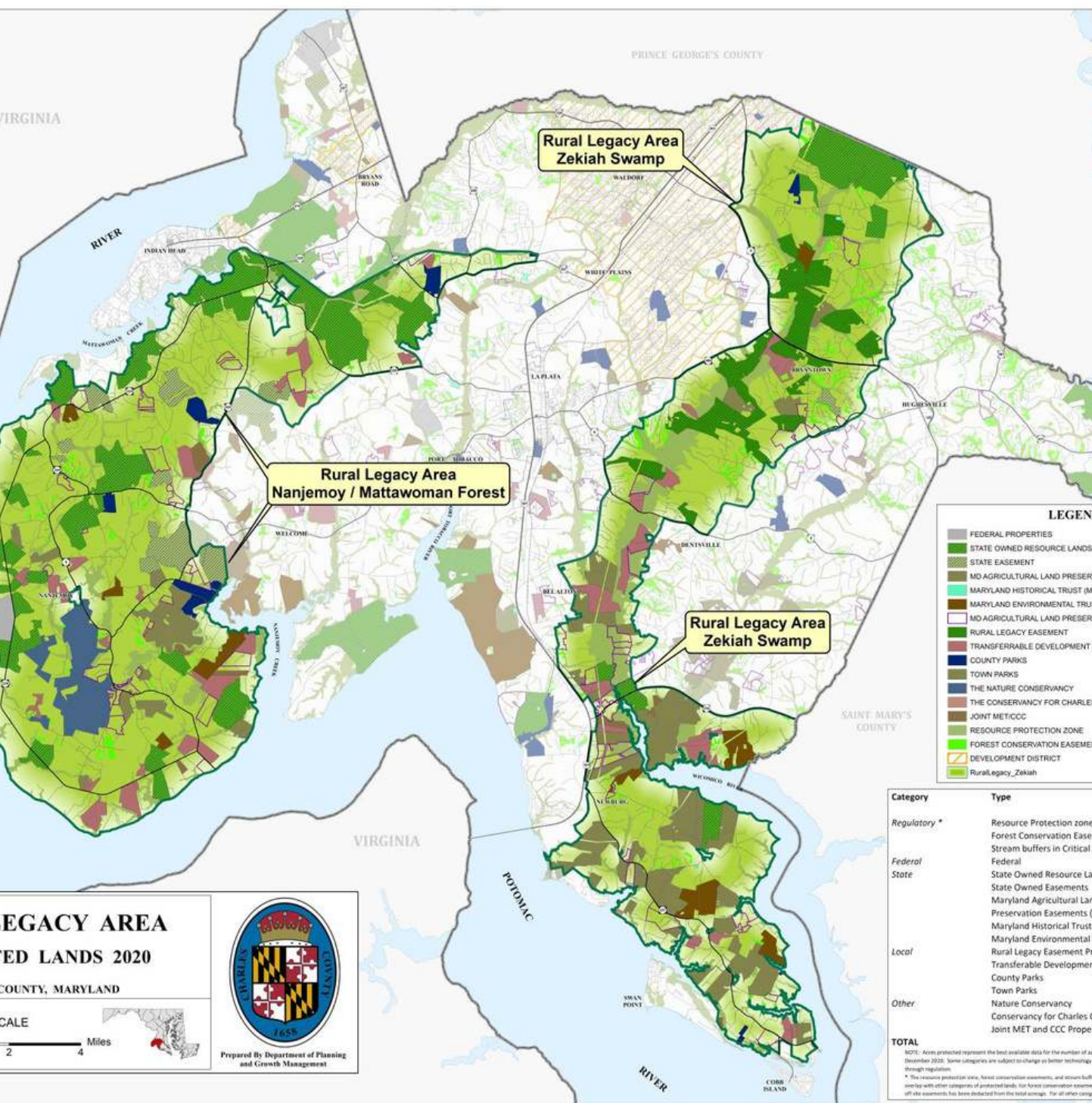
FY 20	12	1,014
	Easements Acquired	Acres Preserved
FY 21	8	1,623
	Easements Acquired	Acres Preserved
FY 22	12	1,097
	Easements Acquired	Acres Preserved

*New applications due June 2022 for FY 23*



## LAND PRESERVATION

# Rural Legacy Area Expansion



**New Nanjemoy-Mattawoman Forest Rural Legacy Area was approved by MD Board of Public Works in December 2021 with a grant award of \$1,013,208.**

**Existing Zekiah Rural Legacy Area received a new grant award of \$1,280,000.**

# **Readiness & Environmental Protection Integration**

- Established CIP budget for Readiness and Environmental Protection Integration (REPI) program.
- Zekiah Rural Legacy Area and Nanjemoy-Mattawoman Forest Rural Legacy Area include REPI-eligible land.
- Southern MD Resource Conservation & Development Inc. is working with County staff to appraise the first potential easement acquisition using REPI funds.



# TRANSFERABLE DEVELOPMENT RIGHTS



**618**

Acres preserved

**151**

TDRs transferred, purchased  
and retired

2021



# TOTAL LAND PROTECTED



\$3.7m

Investment



1,700+

Acres preserved

2021



101,093

Acres preserved

Cumulative

# Climate Change Best Management Practices

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# CLIMATE CHANGE MANAGEMENT

## FIRST PHASE OF CLIMATE ACTION PLANNING PROCESS

MOA with MWCOCG signed in December of 2021

### Part 1

Climate Resilience Plan for  
Government Operations

### Part 2

Climate Action (Mitigation) Plan  
and Greenhouse Gas Emissions  
Inventory for Government Operations

## Resilience Authority

CCG and the Resilience Authority hired Biohabitats in January of 2022 to conduct an assessment and prioritization of approximately 100 neighborhoods with stormwater drainage issues as part of the Private Stormwater Drainage Improvement Program.

# **Military Installation Resilience Review**

Received 18-month grant in March of 2021 and launched initiative for Military Installation Resilience Review (MIRR) for NSF-Indian Head and the Town of Indian Head.

- 12 Stakeholder meetings with the Military, the Town of Indian Head and CCG Staff have been held.
- 3 Regional Collaboration Forums for MIRR grantees have been held.

**ZEKIAH  
WATERSHED  
URBAN  
FLOODING  
ANALYSIS &  
SOLUTIONS**



**\$65,000**

**Grant awarded through the Community  
Resilience Grant Program**  
*(July, 2021)*



# WESTDALE DRIVE STREAM PROJECT



**\$800,000**

**CDBG grant awarded**  
*(May, 2021)*

# STORMWATER PROJECT FUNDING



**\$10.7M**

ARPA Funds

# ELECTRIC VEHICLE CHARGING STATIONS



8

Installed

5—8

Locations under  
consideration



# Chesapeake Conservancy Internship

Sponsored Chesapeake Conservancy Internship Program for flood mapping project with Towson University students. 5 participated in the program.



# Staff Professional Development



83 staff positions designated for climate competencies.

Training is currently being developed for staff and will be rolled out in Spring of 2022.

# Natural Resource Management

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Manage natural resources effectively by investing in renewable energy, reducing stormwater runoff and expanding recycling.

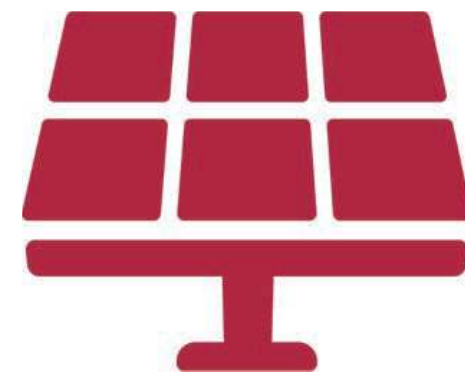
# Expand Solar Energy

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**EXPANDED  
SOLAR ENERGY**

ECONOMIC DEVELOPMENT



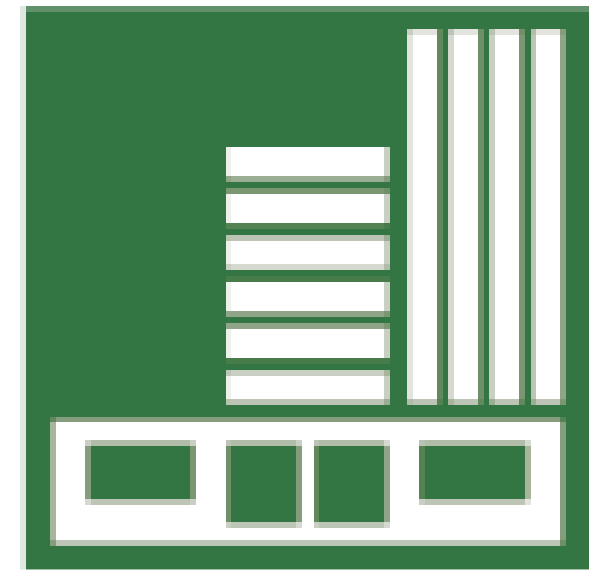
**256**

**Acre Parcel**

ECONOMIC DEVELOPMENT

# Maryland's Commercial Property Assessed Clean Energy Program

Always a good reminder, local property and business owners can take advantage of Maryland's Commercial Property Assessed Clean Energy (MD-PACE) program.



# Increase Rainwater Collection

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# Increased Rainwater Collection



Tax credits and subsidies offered for the purchase and proper installation of rain barrels.

Dates for 2022 workshops established:

- April 23
- July 30
- Oct 22

Workshops include composting information

# Expand Commercial Recycling

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# Commercial Recycling Facility



Charles County, Maryland

Ten-Year Comprehensive Solid  
Waste Management Plan  
(2022-2031)

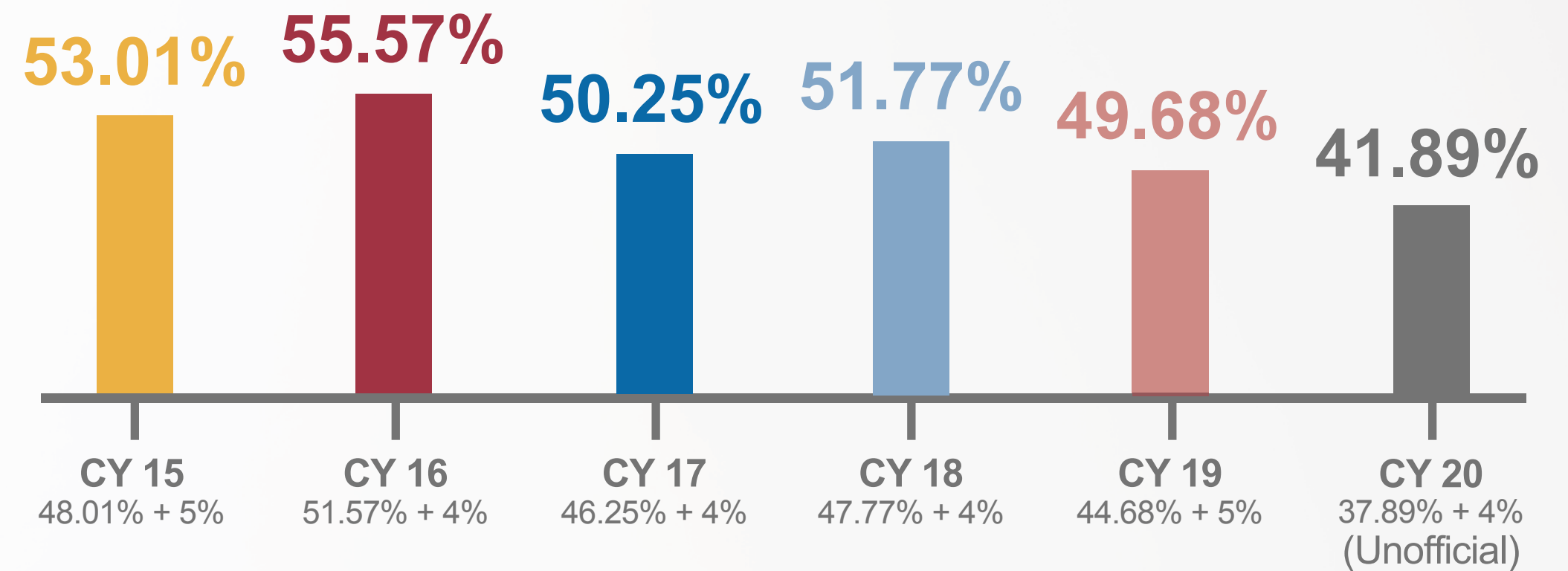
February 9, 2022

One new commercial recycling facility and one commercial recycling transfer station were opened in 2020-21.

Commercial recycling initiatives incorporated into approved 2022-31 Solid Waste Management Plan.



# TOTAL WASTE DIVERTED THROUGH RECYCLING, REUSE, OR COMPOSTING



# Reduce Impervious Surfaces

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# Reduce Impervious Surfaces

In FY21, 203 acres of impervious surface was treated including:

- Cliffton shoreline stabilization
- Cedar Tree and Best Buy pond retrofits
- General Smallwood Middle School bioretention
- Bensville Park dry swales, sand filter and reforestation.





# Reduce Impervious Surfaces

In FY21, the first of three stream restorations in Ruth B Swann Park are underway.

Additional stream restorations beginning this year include:

- Hunt Club Estates
- College of Southern Maryland.





# Environment Management

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**Ensure clean water through effective wastewater treatment and stormwater management.**

# Wastewater Treatment

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# WATER TREATMENT

## Water and sewer regulatory compliance

0.24%

Violations vs. potential violations

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93%

Preventative maintenance achieved as scheduled

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43%

Corrective work orders

vs

57%

Preventative work orders



# Clean Water Supply

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## CLEAN WATER SUPPLY

Four quarterly meetings held with PGM

95%

Compliance with flushing program

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98%

Preventative maintenance achieved as scheduled

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33%

Corrective work orders

vs

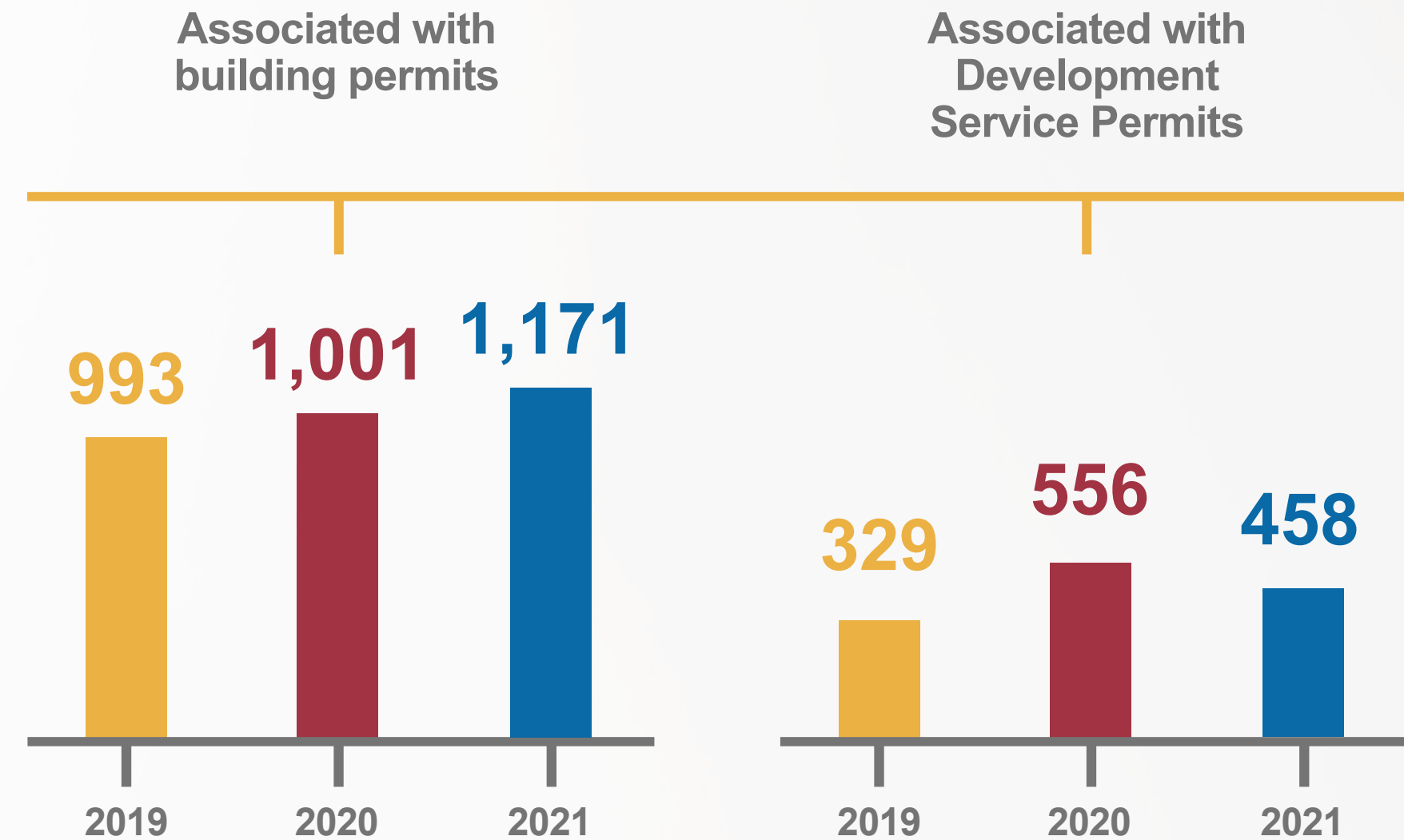
67%

Preventative work orders

# Stormwater Management

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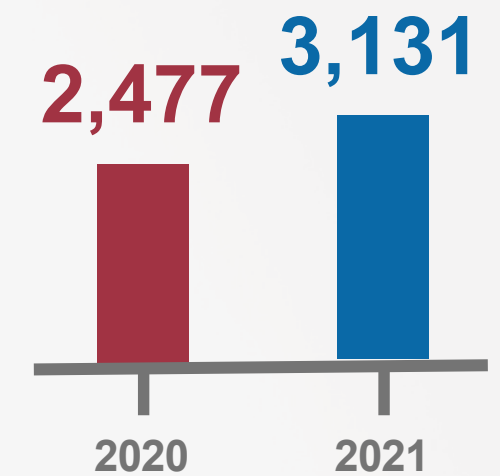
# STORMWATER MANAGEMENT CONSTRUCTION INSPECTIONS



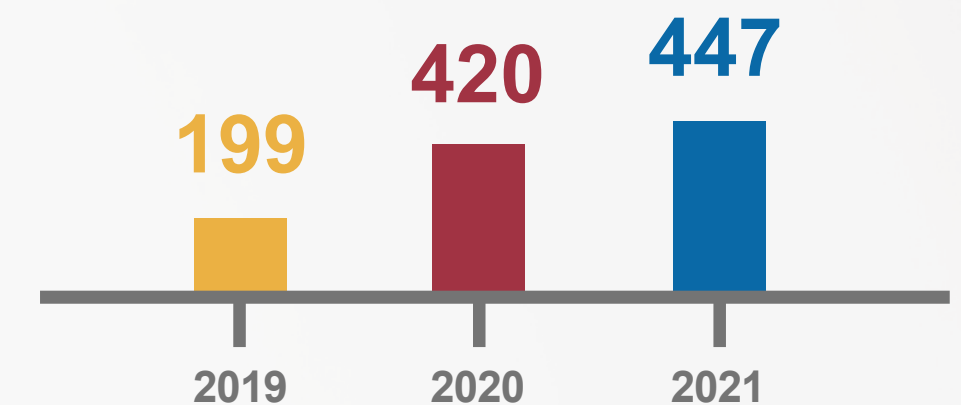


# STORMWATER MANAGEMENT MAINTENANCE AND ILLICIT DISCHARGE

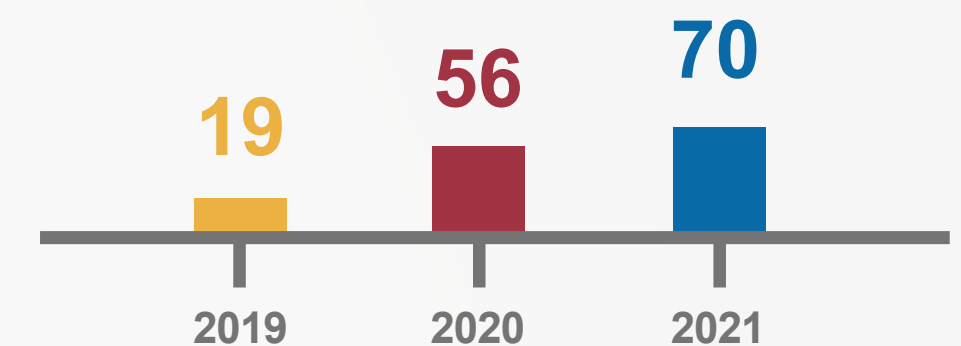
**Stormwater Management  
Maintenance Inspections**  
(Tracking began February 2020)



**Request Cases in response to  
reported drainage, stormwater &  
illicit discharge cases**



**Illicit Discharge Cases Investigated**  
(Tracking began June 2019)



# Illicit Discharge Violation Examples



**Drain from residential home discharged  
directly into County storm drain**



**Trash left uncovered creating illicit storm run  
off into our water ways**





# Well Maintained Stormwater Management Facilities







# Charles County Government

200 Baltimore Street • La Plata, MD • 301-645-0550

Equal Opportunity Employer

[www.CharlesCountyMD.gov](http://www.CharlesCountyMD.gov)

It is the policy of Charles County to provide equal employment opportunity to all persons regardless of race, color, sex, age, national origin, religious or political affiliation or opinion, disability, marital status, sexual orientation, genetic information, gender identity or expression, or any other status protected by law.